looked on clinically as a single disease. In addition to this, the name proposed by Pick contains a diagnostic error, and should not be perpetuated.

SURGERY.

UNDER THE CHARGE OF

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Fractures of the Neck of the Radius.—MOUCHET (*Revue de Chirurgie*, May 10, 1900) points out the fact that these fractures have been shown by the Röntgen method of diagnosis to be much more frequent than has been supposed. They are particularly liable to occur in children between the ages of nine and twelve years. His observations are based upon a series of eleven cases which have come under his observation within a few years. They are not as frequently associated with other fractures about the elbow as has been supposed, but four of these fractures were associated with other fractures. They may be complete or incomplete, though the latter are rare. The line of fracture was through the neck of the radius or just below it, and may be transverse or oblique. The ligaments are frequently ruptured. The muscles are more or less ruptured, and there is always a swelling, which, however, is frequently due to extravasations between the muscles. The amount of displacement is variable, sometimes it is absent, sometimes there is impaction, usually the lower fragment is carried anteriorly and upward by the action of the biceps muscle, but there is generally a portion of the fractured surface in contact, though usually it is only slight.

The mechanism of the production of these fractures is generally that of indirect violence, and seldom, if ever, are they due to direct force.

The attitude of the patient is almost pathognomonic. The elbow is flexed at an obtuse angle or may be at a right angle. The hand is in pronation or semi-pronation and supported by the other hand. It is never in complete supination. There is a swelling of the forearm muscles, due to exudates and not to the displacement. It varies in amount. Ecchymosis is a late sign. Pain is probably the most constant and reliable symptom. Its position and the method of elicitation are, however, valuable adjuncts. Pressure upon the upper arm over the area of the radial head produces pain that is very limited, but very acute, and just in the region of the radial head and neck. The pain is increased by attempts at forcible supination. This pain can be easily distinguished from the general pain which any injury produces.

Abnormal mobility and crepitus are signs of little value, as they are frequently wanting. The movements that can be made by the patient are of prime importance. Supination to any extent is always impossible. This is, however, true of other fractures, but is a valuable confirmatory sign. One sign is not enough in any fracture. The radiographic examination will confirm these signs and add a precision and completeness to the diagnosis which are of extreme value. The skiagraphs must, however, be made with proper care and by a person who understands the surgical possibilities, or else they may be of little value. They should be taken in more than one position if a fracture is to be excluded. The diagnosis is not easy without the skiagraph, and errors are liable to occur frequently. The confusion can readily be made with fracture of the external condyle and forward luxation of the forearm or radius. Where the fracture and deformity are of long standing the diagnosis would be impossible except for the aid given by the Röntgen method of diagnosis.

The treatment should be very simple: by massage and passive motion. Reduction is often impossible, and it is always impossible to maintain the bones in position, no matter what bandage or splints are employed; while their use is liable to produce a restriction in motion and to destroy the function of the joint; the latter will be maintained by the treatment without bandages or splints. If, in spite of all treatment and massage, there remains functional loss, or this is the result of an ancient and vicious union, the surgeon should not hesitate to cut down and remove the head of the radius. The results of such intervention are usually very good.

Cancer of the Breast.—BANKS (*Lancet*, April 7, 1900), in speaking of the operations for cancer of the breast, says of the very radical and extensive operations, that he does not believe it necessary to remove the sternal portion of the pectoralis major and to divide the pectoralis minor and reflect that muscle in order to remove all the glands of the axilla. If the arm be properly manipulated and the great pectoral well dragged upward and inward the very topmost point of the axilla can be cleaned out. Moreover, if there is any doubt at all, the great pectoral can be cut across with very little trouble and then stitched together with catgut sutures, as he has frequently done. With an experience of 250 operations he has given up attempting to get any good out of cleaning out the supraclavicular region. When cancer has laid hold of the supraclavicular glands it has got such a grip as to be past extirpating. It is like a burning house—when the fire is beginning even some buckets of water will put it out; when it has got to a certain pitch a whole fire brigade will not quench it. It is clear that in both classes of operation the majority of fatal cases die from internal metastases without external recurrence, and against these no operation can protect. The swing of the pendulum of surgical opinion is generally too extreme, and has now turned from too slight to too extensive operating. The author has never seen a recurrence in the small pectoral muscles; in the great they creep into it from the subcutaneous tissues and pectoral fascia. They do not primarily originate in the muscle. There is, therefore, no need for its removal on that ground.

The operation which he advocates is one in which an elliptical incision wide of the tumor and of the entire breast is made, with an undercutting, so that the subcutaneous tissues are removed over even a more extensive area than the skin; it reaches even to the sternum. The skin should be particularly freely removed on the side on which the seat of the growth lies. He believes its extension is frequently through the skin, and it is in the skin that most external recurrences are found. The axilla should be opened by an incision just under the edge of the great pectoral, and the whole gland and contents of the cavity, as far as they can be held together, carried away in one mass. The importance of this lies in the fact that recurrence in the axilla takes place for the most part not in the glands that are left behind, but in fragments of lymphatic vessels. .A good plan is to get hold of the axillary vein, and then there is nothing else to trouble about. One must take matters very patiently, getting everything out of the cavity that can be got and cleaning up the digitations of the serratus magnus. He uses no knife in the axilla, but two very long, strong pairs of dissecting forceps and curved probe-pointed scissors. He makes a drain-hole just above the edge of the latissimus dorsi in the lower flap, and puts gauze drains through it and also in the upper angle of the axilla. He employs asepsis, pouring hot water over the wound frequently during the operation, and sees that the wound is dry of blood.

Surgery in the Presence of Sugar in the Urine.—FISK (*Annals of Surgery*, April, 1900) reports a number of cases in which he operated successfully in the presence of sugar in the urine. He reviews the literature of the subject and draws the following conclusions: The presence of glycosuria in those individuals who may have surgical diseases does not in itself constitute an absolute contraindication to any and all surgical relief. Very great judgment must be exercised in the selection of cases, in the determination of the kind and extent of the operation to be performed, and the strictest surgical asepsis must be rigidly enforced throughout. Infection, when it occurs, is from without, and is the result of an error in technique; it thus happens the constitutional symptoms become more serious and out of all proportion to the local, generally ending in death. When infection does not occur the operative wounds heal kindly, but slowly, especially granulating wounds. The vascularity of the tissues must be interfered with as little as possible, so that every operation should be planned with this object in mind. This is particularly so in gangrene of the extremities, in which the statistics of Heidenheim, Kuster, and Smith and Durham show most conclusively the necessity of high amputations in these conditions. He is of the opinion that it is better to cut down upon and ligate the artery in gangrene of the extremities rather than to attempt the bloodless amputation by means of the Esmarch band, because of the possible harm to the tissues, especially the bloodvessels, whose vitality is not the best.

A Method of Early Operation in Perityphlitis.—KOCHER (*Correspondenzblatt für schweizer Aertze*, April 15, 1900) describes a new method of operating by which the suppuration present in cases of perityphlitis can be immediately relieved without endangering the peritoneal cavity, while the operation can be made radically complete by the removal of the appendix at an early date and a secondary operation under absolute asepsis, without any danger of infecting the peritoneal cavity.

The method has been successfuly employed for some time by Prof. Kocher, and is advanced as a solution of the problem which is met with in cases where the inflammation is known to be progressing and possibly to have formed pus, but where there is grave danger in operating immediately by the usual methods, since the adhesions already formed may be too slight to permit the operation without grave danger of infecting the general peritoneal cavity. On the other hand, there is a real danger in inaction, as the adhesions may rupture during the rapid increase of the abscess.

Kocher favors immediate operation as soon as the diagnosis has been established. The majority of cases are seen by the surgeon, however, after a delay has resulted in the hands of the general practitioner. It is in these cases that immediate operation is dangerous, and in which Sonnenburg advises extraperitoneal operation, believing that intraperitoneal operation at this time and diligent search for the appendix are very dangerous. Kocher's method consists, in reality, of two operations—the first is extraperitoneal and antiseptic; the second is transperitoneal or intraperitoneal and aseptic.

The first operation opens the abscess within the area of adhesions by the extraperitoneal route. The pus is evacuated and the abscess tamponed with iodoform gauze, and after draining for two days, until the toxæmia and threatened septic condition of the patient has subsided, when the second or radical portion of the operation is undertaken. The drainage opening is packed with iodoform gauze and closed with sutures. The line of the wound is painted over with iodine and then covered with a sterile dressing. The operation in this part has been antiseptic in character. After careful cleansing of the abdomen, with the regular antiseptic precautions, an incision is made as in appendix operations during the interval, the peritoneum is opened under strict asepsis and the appendix removed. In breaking up the adhesions the abscess cavity is naturally opened, only very little exudate, however, is encountered, and the virulence of the bacteria in this is greatly diminished. In many cases no fluid is found, only fibrous adhesions. After the appendix is removed and the stump covered in and all exudate carefully sponged away the abscess cavity can be closed again, as drainage is afforded by the wound of the first operation. The abdominal wound is closed without necessity of placing gauze drainage in it. The upper layers of the wound are, however, allowed to remain open for two days and then closed by secondary suture. The abscess wound is kept open and allowed to heal by granulation. The two wounds are dressed separately; one aseptically, the other antiseptically, conforming to the methods of operating employed.

A valuable feature of this method of operating is that it permits of bacteriological examination of the pus in the abscess, so that the relative virulence of the infection can be determined before the peritoneum is opened at the second operation. It has been found that there is less danger of further infection in cases where the colon bacillus or the pneumococcus is found than where the staphylococcus, the streptococcus, or a mixed infection is present. The bearing of such information upon the second operation is very evident. In cases of the milder infection the peritoneum can be depended upon to take care of a slight infection during the second operation. In the graver cases the utmost care has to be exercised.

This operation has the advantage of producing an abdominal wound free from drainage areas, which statistics show lessens very greatly the danger of post-operative hernia.

PEDIATRICS.

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Tuberculosis of the Genital Tract in Children.—MARTHA WOLLSTEIN (*Archives of Pediatrics*, May, 1900, p. 347) records a very complete autopsy upon the body of a child, two years old, an inmate of the Infants' Hospital on Randall Island. There was no clinical history other than that the child had had measles, followed by persistent cough and emaciation. A purulent vaginal discharge had been noticed for several weeks before death, but no bacteriological examination had been made. Miliary tubercles were scattered throughout the substance of all the lobes of the lungs; the bronchial lymph-nodes were all enlarged and cheesy, not softened; there were a few small tubercles in the liver, many in the spleen. The peritoneal surface of the rectum was covered with a fibrinopurulent exudate and studded with tubercles, which were scattered all over the pelvic peritoneum. In the right broad ligament was a fluctuating mass, 4 x 6 cm. in diameter, distinctly separated from the uterus, and at first sight obscuring the right tube and ovary. This mass contained green pus, and had bent the right Fallopian tube out of its course. The corresponding ovary contained cheesy material. The left tube was dilated to three times its normal size, but the ovary was normal. Both tubes contained cheesy material. The uterus was normal in size, and its mucous lining healthy in appearance; the serous coat contained many small tubercles. The cul-de-sac of Douglas was occupied by a pocket of pus. Some purulent exudate was found in the vagina, preparations from which contained tubercle bacilli in small numbers and groups of cocci not decolorized by Gram's stain. Tubercle bacilli and staphylococci were also found in the pus of both collections in the pelvis; no gonococci were present.

It was clear, both from the gross appearance and the microscopical study, that the oldest tuberculous lesion was one of the bronchial lymph-nodes, the youngest in the lungs, spleen, and liver; the Fallopian tubes, pelvic peritoneum, and right ovary became involved, in the order named, before the other viscera. Seventeen cases of tuberculosis of the female genital tract